Navy Environmental Quality Fact Sheet

Do you remove paint using chemical paint stripping or sand blasting?

Would you like to improve this process in the following areas?

- ***Meeting environmental compliance regulations*** -- Reduce the use of chemical solvents and their associated air emissions. Reduce disposal of waste solvents. Regulatory areas include RCRA, NAAQS and NESHAP.

- ***Improving workers' safety and health*** - Reduce worker exposure to hazardous solvents and dust from abrasive blasting.

- ***Increasing productivity*** -- No change from current operations.

- ***Saving money*** --Decrease solvent purchases and solvent disposal costs.

Glovebox Plastic Media Blaster

Traditionally, hazardous solvents have been used to remove paint. Use of these solvents can have many adverse environmental effects, including hazardous waste generation and air emissions. The Glovebox Plastic Media Blaster is a dry abrasive blasting process, designed to replace chemical paint stripping operations and conventional sand blasting. The glovebox is a direct-pressure, blast-cleaning cabinet with manually controlled nozzles through which plastic media, fluidized with compressed air, is projected. The glovebox is designed to enable the operator to work through the glove ports and manually direct the abrasive blast against the work piece. The blast action can be observed through the window. Separators and filters remove paint wastes and corrosion from the reusable blast media. This method reduces the quantity and toxicity of the waste stream. Glovebox Plastic Media Blasters are being used successfully at many Navy installations including NAVSTA Mayport. ***This equipment is available through the Navy Pollution Prevention Equipment Program (PPEP).***

How can you achieve these improvements?

Use a Glovebox Plastic Media Blaster

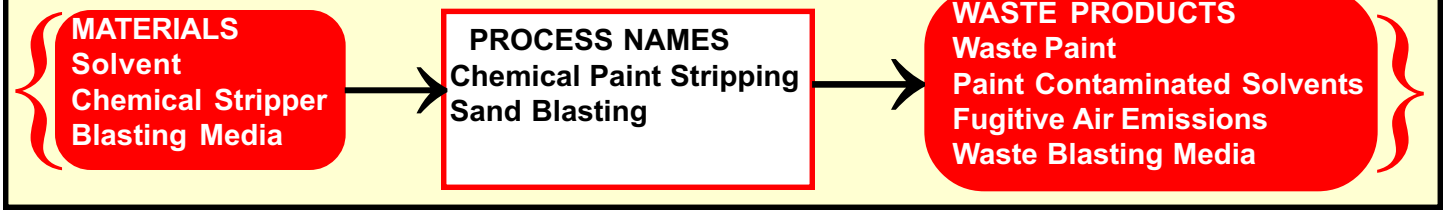
How does this equipment work?

Plastic media and compressed air are used to remove paint and light corrosion.

How will this equipment save you money?

The Glovebox Plastic Media Blaster reduces labor hours for paint stripping operations. It also eliminates solvent procurement and reduces hazardous waste disposal costs. Equipment cost is approximately $10,000. This equipment typically pays for itself within a year.

Typical Process Flow Diagram



How can this technology eliminate or reduce pollution?

This P2 method can eliminate worker exposure to harmful paints and solvents. Implementation will result in the following pollution reductions:

- Eliminates Use of Hazardous Chemical Solvents and Associated Fugitive Air Emissions
- Plastic Blast Media Can Be Reused Many Times Before Requiring Disposal

Which shops can benefit most from this technology?

This technology can be used in processes that use solvents to remove paint and light corrosion from small parts. Typical shops include:

- Automotive & Aircraft Parts
- Support Equipment Parts Maintenance
- Ship Part Maintenance and Repair
- Facilities Parts Maintenance

Take action: How can you implement this technology?

- **Activity Shop & Work Center Personnel**. Contact your Pollution Prevention Program Manager. The P2 Program Manager can provide more information and conduct a more detailed analysis, and may be able to provide this equipment at no cost to a Shop or Work Center.
- **Activity Pollution Prevention Manager**. Request this equipment through the Navy P2 Equipment Program (PPEP). Depending on the application, the Environmental Program Requirements Cookbook may contain project submission information for annual budget requests sent to your claimant.
- **For Additional Technical Information**. More information about this technology can be found on Joint Service P2 Opportunity Handbook Data Sheet 5-5 (Web: http://www.nfesc.navy.mil/enviro/index.html) or in the PPEP Book (Web: http://www.lakehurst.navy.mil/p2/index.htm).

Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by implementing pollution prevention technologies and methods to reduce compliance requirements. This Fact Sheet is one in a series designed to encourage activities to implement pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

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